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## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/763,824  
Source: Pt/09  
Date Processed by STIC: 6/6/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 09/763,824

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics  
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino  
Numbering The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0  
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences  
(OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences  
(NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9 Use of n's or Xaa's  
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>  
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0  
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



PCT09

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/763,824

DATE: 06/06/2002

TIME: 14:31:07

Input Set : A:\seq listing filed.txt

Output Set: N:\CRF3\06062002\I763824.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: The Secretary of State for Defence in Her Britannic Majesty's  
5 Government of the United Kingdom of Great Britain and Northern Ireland  
6 Tisi, Laurence C  
7 Murray, James AH  
8 Lowe, Christopher R  
9 White, Peter J  
10 Murphy, Melanie J  
11 Price, Rachel L  
12 Squirrell, David

15 <120> TITLE OF INVENTION: Novel enzyme  
17 <130> FILE REFERENCE: IPD/P1206/WOD  
19 <140> CURRENT APPLICATION NUMBER: US/09/763,824  
20 <141> CURRENT FILING DATE: 2002-04-29  
22 <150> PRIOR APPLICATION NUMBER: GB 9823468.5  
23 <151> PRIOR FILING DATE: 1998-10-28  
25 <160> NUMBER OF SEQ ID NOS: 35  
27 <170> SOFTWARE: PatentIn Ver. 2.1  
29 <210> SEQ ID NO: 1

30 <211> LENGTH: 23  
31 <212> TYPE: DNA  
32 <213> ORGANISM: Artificial Sequence

34 <220> FEATURE:  
35 <223> OTHER INFORMATION: Description of Artificial Sequence:

36 Oligonucleotide  
39 <400> SEQUENCE: 1  
40 cgccggtgag ctcccgcgcg ccg

43 <210> SEQ ID NO: 2  
44 <211> LENGTH: 23

45 <212> TYPE: DNA  
46 <213> ORGANISM: Artificial Sequence  
48 <220> FEATURE:

49 <223> OTHER INFORMATION: Description of Artificial Sequence:  
50 Oligonucleotide

52 <400> SEQUENCE: 2  
53 cggcggcggg gagctcaccg gcg

56 <210> SEQ ID NO: 3  
57 <211> LENGTH: 51

58 <212> TYPE: DNA  
59 <213> ORGANISM: Artificial Sequence  
61 <220> FEATURE:

62 <223> OTHER INFORMATION: Description of Artificial Sequence:  
63 Oligonucleotide

65 <400> SEQUENCE: 3

OK

(global error)  
insufficient explanation - give source of genetic material  
(see item 11 on Error summary sheet)

## RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/09/763,824

TIME: 14:31:07

Input Set : A:\seq listing filed.txt

Output Set: N:\CRF3\06062002\I763824.raw

```

66 cgaacacttc ttcacgttg accgccttaa gtctttaatt aaatacaaag g          51
69 <210> SEQ ID NO: 4
70 <211> LENGTH: 51
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Description of Artificial Sequence:
76   Oligonucleotide
78 <400> SEQUENCE: 4
79 cctttgtatt taattaaaga cttaaggcgg tcaactatga agaagtgttc g          51
82 <210> SEQ ID NO: 5
83 <211> LENGTH: 32
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Description of Artificial Sequence:
89   Oligonucleotide
91 <400> SEQUENCE: 5
92 gaaaggcccg gcaccagcct atcctctaga gg          32
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 32
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Description of Artificial Sequence:
102   Oligonucleotide
104 <400> SEQUENCE: 6
105 cctctagcgg ataggctggt gccgggcctt tc          32
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 36
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence:
115   Oligonucleotide
117 <400> SEQUENCE: 7
118 ccataaattt accgaattcg tcgacttcga tcgagg          36
121 <210> SEQ ID NO: 8
122 <211> LENGTH: 18
123 <212> TYPE: DNA
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Description of Artificial Sequence:
128   Oligonucleotide
130 <400> SEQUENCE: 8
131 gtgtggaatt gtgagcgg          18
134 <210> SEQ ID NO: 9
135 <211> LENGTH: 21
136 <212> TYPE: DNA

```

## RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/09/763,824

TIME: 14:31:07

Input Set : A:\seq listing filed.txt

Output Set: N:\CRF3\06062002\I763824.raw

```

137 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Description of Artificial Sequence:
141   Oligonucleotide
143 <400> SEQUENCE: 9
144 gagatacgcc gcggttcctg g                               21
147 <210> SEQ ID NO: 10
148 <211> LENGTH: 21
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Description of Artificial Sequence:
154   Oligonucleotide
156 <400> SEQUENCE: 10
157 ccaggaaccg cggcgatatct c                               21
160 <210> SEQ ID NO: 11
161 <211> LENGTH: 30
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence:
167   Oligonucleotide
169 <400> SEQUENCE: 11
170 ccctattttc attcctggcc aaaagcactc                       30
173 <210> SEQ ID NO: 12
174 <211> LENGTH: 30
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Description of Artificial Sequence:
180   Oligonucleotide
182 <400> SEQUENCE: 12
183 gagtgcctttt ggccaggaat gaaaataggg                       30
186 <210> SEQ ID NO: 13
187 <211> LENGTH: 27
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Description of Artificial Sequence:
193   Oligonucleotide
195 <400> SEQUENCE: 13
196 ccgcatagag ctctctgcgt cagattc                           27
199 <210> SEQ ID NO: 14
200 <211> LENGTH: 27
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Description of Artificial Sequence:
206   Oligonucleotide

```

## RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/09/763,824

TIME: 14:31:07

Input Set : A:\seq listing filed.txt

Output Set: N:\CRF3\06062002\I763824.raw

```

208 <400> SEQUENCE: 14
209 gaatctgacg cagagagctc tatgcgg                27
212 <210> SEQ ID NO: 15
213 <211> LENGTH: 30
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence:
219     Oligonucleotide
221 <400> SEQUENCE: 15
222 gttgaccgct tgggattcctt aattaaatac            30
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 22
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence:
232     Oligonucleotide
234 <400> SEQUENCE: 16
235 gtatagattt gaaaaagagc tg                    22
238 <210> SEQ ID NO: 17
239 <211> LENGTH: 22
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Description of Artificial Sequence:
245     Oligonucleotide
247 <400> SEQUENCE: 17
248 cagctctttt tcaaattctat ac                    22
251 <210> SEQ ID NO: 18
252 <211> LENGTH: 22
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: Description of Artificial Sequence:
258     Oligonucleotide
260 <400> SEQUENCE: 18
261 ggctacatac tggagacata gc                    22
264 <210> SEQ ID NO: 19
265 <211> LENGTH: 22
266 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence:
271     Oligonucleotide
273 <400> SEQUENCE: 19
274 gctatgtctc cagtatgtag cc                    22
277 <210> SEQ ID NO: 20
278 <211> LENGTH: 21

```

## RAW SEQUENCE LISTING

DATE: 06/06/2002

PATENT APPLICATION: US/09/763,824

TIME: 14:31:07

Input Set : A:\seq listing filed.txt

Output Set: N:\CRF3\06062002\I763824.raw

279 <212> TYPE: DNA  
 280 <213> ORGANISM: Artificial Sequence  
 282 <220> FEATURE:  
 283 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 284 Oligonucleotide  
 286 <400> SEQUENCE: 20  
 287 gcagttgcgc ccgtgaacga c 21  
 290 <210> SEQ ID NO: 21  
 291 <211> LENGTH: 21  
 292 <212> TYPE: DNA  
 293 <213> ORGANISM: Artificial Sequence  
 295 <220> FEATURE:  
 296 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 297 Oligonucleotide  
 299 <400> SEQUENCE: 21  
 300 gtcgttcacg ggcgcaactg c 21  
 303 <210> SEQ ID NO: 22  
 304 <211> LENGTH: 29  
 305 <212> TYPE: DNA  
 306 <213> ORGANISM: Artificial Sequence  
 308 <220> FEATURE:  
 309 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 310 Oligonucleotide  
 312 <400> SEQUENCE: 22  
 313 caaatcattc cgggtactgc gattttaag 29  
 316 <210> SEQ ID NO: 23  
 317 <211> LENGTH: 29  
 318 <212> TYPE: DNA  
 319 <213> ORGANISM: Artificial Sequence  
 321 <220> FEATURE:  
 322 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 323 Oligonucleotide  
 325 <400> SEQUENCE: 23  
 326 cttaaaatcg cagtaccgga aatgatttg 29  
 329 <210> SEQ ID NO: 24  
 330 <211> LENGTH: 27  
 331 <212> TYPE: DNA  
 332 <213> ORGANISM: Artificial Sequence  
 334 <220> FEATURE:  
 335 <223> OTHER INFORMATION: Description of Artificial Sequence:  
 336 Oligonucleotide  
 338 <400> SEQUENCE: 24  
 339 ccgcatagaa ctctctgcgt cagattc 27  
 342 <210> SEQ ID NO: 25  
 343 <211> LENGTH: 27  
 344 <212> TYPE: DNA  
 345 <213> ORGANISM: Artificial Sequence  
 347 <220> FEATURE:  
 348 <223> OTHER INFORMATION: Description of Artificial Sequence:

→ Please correct this error in subsequent  
 sequence.

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/763,824

DATE: 06/06/2002  
TIME: 14:31:08

Input Set : A:\seq listing filed.txt  
Output Set: N:\CRF3\06062002\I763824.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:28; N Pos. 15,16,17  
Seq#:29; N Pos. 13,14,15